



do not require any management. A slot machine set to pay out 95% to players will pay out automatically to reach a level of 95% over time without any management or maintenance.

The advantages this concept gives are low start-up overheads and the freedom to concentrate on two basic concepts - **recruitment** and **retention** - which define the success of a casino. The downside of this is that this simplicity means there are many small operators competing in this market.

To compete in the internet market the temptation is to expand our online brand into Sportsbook. To offer odds on sports and other events happening round the world gives our players a constantly varying range of interesting events to bet on. It also allows them to use their skill and judgment in deciding which outcome they feel is the most likely for any specific event.

This ability to influence the results of their wager takes sports book into a whole new realm compared to traditional fixed odds games like slots. It is also, in a nutshell, the reason why sports book is a much more expensive and risky endeavor for any gaming promoter.

If we wish to offer odds on a particular sporting event, say an NFL League match, then we must be sure that the odds we offer on all of the possible outcomes will allow us to take bets from our players, payout the winners and to end up with a profit. This is not as easy as it may sound.

There are a lot of very, very well-informed experts on sports in the world and for us to assume that we will predict the outcomes better than they will is sometimes a very brave notion. It is our aim to offer odds which are keen enough to make them think they will win money whilst at the same time attracting bets on all the possible outcomes of the game to the degree that we will profit from any one of them happening.

To take a simple win lose draw event like a football game we would like the bets that we receive to be such that we can "round the book". Very simply, this means that we set the odds and take bets in proportions which allow us to make a profit whatever happens in the game. A perfectly round book will allow us to make our target margin (say 6%) on any of the three possible outcomes.

For example, if we take in bets as follows:

|             |      |
|-------------|------|
| Team 1 wins | \$50 |
| Draw        | \$5  |
| Team 2 wins | \$45 |

Then we would like to pay out \$94 to the winner and retain our \$6 profit *no matter what the outcome is*. To do this we have to offer odds as follows:

| <u>Outcome</u> | <u>Bets taken</u> | <u>Payout</u> | <u>Odds offered</u> |
|----------------|-------------------|---------------|---------------------|
| Team 1 wins    | \$50              | \$96          | $96/50 = 1.92$      |
| Draw           | \$5               | \$96          | $96/5 = 19.2$       |
| Team 2 wins    | \$45              | \$96          | $96/45 = 2.13$      |

Being able to make these odds (and knowing the outcome ahead of time) would make our life as sportsbook operators very simple. There are three immediate reasons why we can't do this:

1. **We don't know the outcome.** We may employ a staff of very clever experts who will look at the recent performance of both teams, the history of their previous encounters and how they each perform at home or away, in different weather situations (heat, rain etc.). They will look at individual players current form and try to tie in the team's motivations – are they facing promotion or relegation in their leagues, have they played too many matches recently, are there any injuries and so on - but they are still guessing.
2. **People like simple odds.** They also like different presentations of odds – decimal (as this example), fractional (2 to 1, 15 to 8) or American. Showing these odds, especially fractional odds will need some rounding up or down.
3. **We are competing with other sportsbooks.** Our competitors want the same bets from the same customers we do, and our players want the best odds, to the extent that many of them will go comparison shopping on specialist sites that show the latest odds from many different sportsbooks just like shopping for travel or insurance.

Taking this into consideration it starts to look a bit more of a hands-on operation, with someone making decisions on the odds we offer before anyone bets (starting odds or starting prices – The “**SP**”). As we take in bets we might see them heavily favoring team 1. This would result in us losing money if team 1 actually wins so we compensate by lowering the odds we offer on team 1 and increase the odds we offer on team 2 to try to attract more bets on that side. This constant monitoring and adjustment is called **Trading**. Traders are very highly paid, skillful people who are highly sought after in the business.

So, it’s starting to look quite involved. Now add in the fact that there are probably many games going on at once on any typical day across up to 70 different sports that we cover and we immediately start thinking of a bigger office to hold all of our traders. Here’s the events available at noon on a typical Wednesday – and this is pretty quiet:

| In-Play   | Today's Games   | Highlights  |  |   |   |  |  |
|---|---|---|--|---|---|--|--|
| <br>Soccer<br>70 | <br>Tennis<br>26 | <br>Cricket<br>1 | <br>Basketball<br>5 | <br>Darts<br>1 | <br>E-Sports<br>2 | <br>Table Tennis<br>6 | <br>Volleyball<br>3 |

**But that’s only the tip of the iceberg.** Now factor in that any self-respecting operator will offer not just the basic Win-Lose-Draw bet (known in the trade as a 1-X-2 market) but anything up to ONE HUNDRED AND FIFTY different markets (bets on offer) on any single soccer match. These range from who will score the goals to whether a free kick will result in a goal in the next minute.

Fortunately, many of these in-play bets are automated. They do, however, rely on lots of very expensive information being received in real time from the game itself. They also rely on very sophisticated trading algorithms which an operator will rent from a specialist supplier.

All of this expensive data and expensive trading is....expensive. We need to justify the cost by making sure we have lots of client and turn over lots of money. Building this clientele takes time, which is why many operators start with a casino and then add on sports betting when they are established.

# The Sportsbook site

This is a typical sportsbook page showing a minor-league soccer match:

The screenshot shows a sportsbook interface for 'THE CASHBACK BOOKMAKER'. The main navigation bar includes 'REWARDS', 'SPORTS', 'IN-PLAY', 'LIVE CASINO', 'CASINO', 'VIRTUALS', and 'PROMOTIONS'. Below this is a sub-navigation bar with 'OVERVIEW', 'EVENT VIEW', 'LIVE SCHEDULE', 'VIP', and 'HELP'. The page is displaying a live soccer match: Parma Calcio vs Nuova Cosenza, with a score of 1:0 at 29:43 in the 1st half. The match is part of the Coppa Italia | Round 4. On the left, there is a list of 53 soccer matches across various leagues, including Italy Cup, AFC Champions League, and others. The central area shows betting markets for the match, including 1X2, 1X2 1st Half, 2nd Goal, Total Goals, and Double Chance. The right side features a visualization of the match, a betting slip with a total return of £6.11, and a 'TOP PROMOTIONS' section with offers like 'REWARDS POINTS REVOLUTION' and 'VAR INSURANCE'. Red arrows labeled A through H point to specific elements: A points to the 'SOCCER (53)' filter; B points to the list of soccer matches; C points to the match title 'Parma vs Nuova Cosenza'; D points to the visualization; E points to the 'Daily Points Earned' section; F points to the betting slip; G points to the 'ACCEPT CHANGES' button; and H points to the 'VAR INSURANCE' promotion.

This page allows us to monitor and bet on one soccer match (note that there are 53 matches being played currently and we are offering 75 different markets (individual bets) on just this match).

A. The match we are looking at is a minor league Spanish game. This game is being played at 1pm on a Wednesday simply to allow sportsbooks to offer it during a quiet time. Horse racing or greyhound racing, for example, will normally be organized in any country so that the TV stations and sportsbooks have something live to show every 20 minutes throughout the day.

B. Other games currently live around the world that we are featuring – again, remember that this is just one sport out of up to 70 on offer.

C. The current score. This must be accurate to a few milliseconds as we need to react to changing scores or events and close markets or change odds. Accepting bets after the event (even tenths of seconds after the event) is a very costly thing to do!

D. The game Visualization. This is an add-on which many bigger operators add to their site, showing match events, the position of the ball and historic data for possessions and other events (Live stats box shown here).

E. Rewards points earned – this is a customer retention tool which this site (I am too modest to say who thought of the idea) has pioneered and which is becoming more common online. It is quite familiar to physical casino customers to have a loyalty club but a very new concept in the online world.

F. Our bet slip. This is where bets the player is going to make show up. He can edit the bets, the amount he placed on each one and whether he wants to combine them (pay out more on all events coming true).

G. The markets we are offering on this event. These are the whole-game events – see below for in-play markets.



H. Promotions that the sportsbook is offering to its players. Maximizing player retention is very important aspect of the business given the cost of recruiting a new customer and the competition out there.

## The Bet Slip

This is a simple betting slip – simple meaning that only one bet has been selected. The player has selected Shanghai to win in the 1X2 market (win-draw-lose). Current odds offered are 3.45 and he has opted to gamble \$5 which will return him \$17.25 (plus his \$5 stake) if he wins.

**BETTING SLIP** MY BETS (0)

**SINGLES**

Shanghai SIPG @ 3.45

Shanghai SIPG vs Yokohama F Marinos  
[0:0] 1X2 Live Betting

5.00

Return **£ 17.25**

Number of bets 1  
Stake £ 5.00

**Total return £ 17.25**

**PLACE BETS**

**BETTING SLIP** MY BETS (0)

**SINGLES**

Shanghai SIPG @ 3.45

Shanghai SIPG vs Yokohama F Marinos  
[0:0] 1X2 Live Betting

5.00

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Over 2.5 @ 3.95

Shanghai SIPG vs Yokohama F Marinos  
[0:0] OU Total Goals Live!

2.00

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3:2 @ 60.00

Shanghai SIPG vs Yokohama F Marinos  
[0:0] Exact Score Live!

1.00

**> MULTIPLES**

Number of bets 3  
Stake £ 8.00  
**Total return £ N/A**

**PLACE BETS**

This is a slip showing three bets on the same match. Each one has a stake and odds.

We can also use the “Multiples” tab to combine bets. Say we pick the winners of 3 different games then we can make them a multiple so that the amount we win on the first result becomes our stake on the next and so on. These complex bets can result in long odds and huge payouts.

They are popular with players – my grandad used to put a pound on to a horseracing Yankee every Saturday. A **Yankee** is a four-selection wager that consists of 11 different **bets**: six doubles, four trebles and a four-fold accumulator. The Yankee is rumored to be named after an American soldier that placed a small bet in the UK and due to the multiple roll-over mechanics at work won back hundreds of thousands.

Operators love these complex bets as the odds of winning become astronomical and the retention for the house is much larger than on simple bets. These bets will usually be the headline offers in the windows of physical betting shops (sportsbooks) in the UK.

Many of these bets have their own names. Look at [this Wikipedia article](#) for a trip around Yankees, Patents, Round Robins, Super Flags, Union Jacks and the rest.

## In-play betting

Home > Sports > Soccer > Italy Cup > Parma vs Nuova Cosenza

Coppa Italia | Round 4  
63:25 / 2nd half  
Parma Calcio 2:1 Cosenza  
HT 2:1

CREATE YOUR BET

All Markets (47) | Main (16) | Goals (15) | Fast Markets (16)

Next 1 minute (65:00-65:59)

|           |     |       |
|-----------|-----|-------|
| Goals     | Yes | 13.00 |
| Corners   | Yes | 7.25  |
| Free-Kick | Yes | 2.65  |
| Goal-Kick | Yes | 4.55  |
| Throw-In  | Yes | 2.20  |

Next 1 minute (66:00-66:59)

|           |     |       |
|-----------|-----|-------|
| Goals     | Yes | 13.00 |
| Corners   | Yes | 7.25  |
| Free-Kick | Yes | 2.65  |
| Goal-Kick | Yes | 4.50  |
| Throw-In  | Yes | 2.20  |

Next 1 minute (67:00-67:59)

|           |     |       |
|-----------|-----|-------|
| Goals     | Yes | 13.00 |
| Corners   | Yes | 7.25  |
| Free-Kick | Yes | 2.65  |
| Goal-Kick | Yes | 4.50  |
| Throw-In  | Yes | 2.20  |

Next 1 minute (68:00-68:59)

|           |     |       |
|-----------|-----|-------|
| Goals     | Yes | 13.00 |
| Corners   | Yes | 7.25  |
| Free-Kick | Yes | 2.65  |
| Goal-Kick | Yes | 4.50  |

Visualization

Daily Points Earned: 7,280,104 RWP

Earn points faster when you place multiples!

BETTING SLIP MY BETS (0)

SINGLES

Yes [65:00-65:59] @ 7.25

Parma vs Nuova Cosenza  
[2-1] Corners Next 1 minute Live!

0.00 Return

Number of bets 0  
Stake £ 0.00  
Total return £ 0.00

PLACE BETS

Clear all

TOP PROMOTIONS

REWARDS POINTS REVOLUTION  
Earn cashback on every Sports and Casino bet you place up to 4x faster in November  
Terms Apply More Info >>

VAR INSURANCE  
Bet on selected matches & get your stake as a Free Bet if your team scores a winner that is disallowed via VAR  
Terms Apply More Info >>

PICK A PONY  
Enter for free and win a guaranteed prize

them to place these bets in real time.

Under the tab “Fast Markets” on the game page we showed earlier are the **In-Play** bets.

Here we can see that players can bet on certain events happening in the next minute, the one after that and so on. If we think a goal is coming soon we can bet on that – we might win 13 times our stake.

These in-play markets are becoming very popular, taking up to 50% of the revenue on a game. In fact it is now very common to see people watching the game in a bar to have their phone in their hand as a second screen to allow

This screenshot shows a bet that a corner will occur in the next minute. The player has not yet chosen his stake. Fast action events like this are very complex and expensive to offer – high bandwidth, very fast processing and complex algorithms are needed, but they return very high profits when done well.

## Operating an online Sports Book

For this all to come together we as a sportsbook operator will buy in services from lots of different suppliers:

**The Platform** - The underlying website which makes and serves the web pages, manages players records, runs bet management and accounting systems which take and record bets, close markets and pay out winnings.

**The data feeds** - What events are on today, what are the odds we should offer, what is the current score, how are odds moving in the market. When do events close.

**The Visualizations** - The graphics that we show to the players, including live TV feeds of matches and races. There is an old adage that information breeds opinion and opinion breeds action - show them and they will bet.

We will also have to supply or outsource:

**Trading** - We may (probably will) take odds feeds from a supplier but we will often want to have our own staff watching them. For example, we might take a big bet on one side of a game from a high roller which throws the book completely out of balance. Our own traders may then want to change the odds to encourage more bets on the other side to round off the book again. If the book is too far off then we might choose to lay off the excess - place a bet ourselves with another trade bookmaker just in case the 'wrong' outcome happens. Many systems will monitor our total exposure, even giving live warnings and limiting a traders actions.

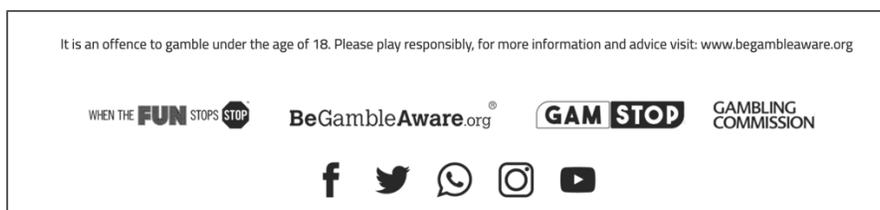
**Online support** - With any system this complex the players can often get confused or place bets they didn't mean to. Add to this the complex bonus structures we put in place to attract customers which require them to play their

account balance several times over before they can withdraw and the need for somebody that they can talk to who can help with their account is obvious. Nowadays this support usually takes the form of a text chat box on the website. We will usually man this ourselves during busy hours and maybe have a service or system that takes messages at other times.

**Payment processing** - Getting players funds into and out of our bank account is fundamental, and the ever-increasing regulations covering banking make this a serious task. Governments have, over recent years, worked out that they can make money by licensing online gaming and they choose to limit illegal play by either stopping advertising on social and other media by unlicensed operators or by preventing their citizens from sending or receiving money. Keeping banks and credit card processors happy is a big part of the operator's job.

**KYC/AML** - Know your customer and Anti-Money Laundering regulations are complex and can vary from country to country. These requirements often mean that before we can take a bet from a player we need to ask for a scan of his passport and a recent utility bill. We may then check him on the electoral roll or against a credit rating agency. We will also have to check he is not on any list of known gambling addicts. And all before he can place a single bet or withdraw any funds.

We also have to build safeguards into the site to stop problem gambling. At its simplest we have to (in the UK and many other places) have links to addiction-care agencies on the site and on advertisements. On top of this we have to monitor his play and pop-up warnings if he plays for too long or his rate of play increases markedly. We must also offer him mechanisms whereby he can opt-out of play - meaning we lock his account either permanently or for a 'cooling-down period' of his choosing.



- A typical gambling site footer -

Enforcement can be painful and inspections regular - there is nothing more motivated than a government agency with the power to inflict large fines on a business. The world has tended to follow the UK Gambling Commissions' model, which in turn only encourages them to be more innovative in their efforts.

## Conclusion

This has been a whirlwind trip around operating an online sportsbook. It is very complex, requires a very solid system and professional staff and can involve a lot of risk if we take the wrong bets on the wrong event.

It can also be very profitable and can build a business which is very valuable. Creating a good sportsbook can take some time and a lot of money. For this reason, many operators will start with a casino offering a full range of fixed-odds and launch their sportsbook after a year or 18 months of trading. By this time, they have a player base which can support the extra overhead costs of the enlarged organization more easily.

Incidentally, the site used for these examples - sportnation.com - took nearly three years to get to its current state of development but now turns over around £25 million UK pounds each month on sportsbook and casino and produces a net gaming revenue of over a million pounds per month. Total investment to get there was around £7 million UKP and the business has just been sold (way too early in my opinion) for around £15 million. In another 2 years it will be worth a lot more than that as it's player base grows and matures.

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